



#7 Picard A
DRAUGHTS
9-12-03

Docket No. 740116-358

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

Heinz WALTER et al. : Group Art Unit: 2635

Application No. 10/051,297 : Examiner: Unknown

Filed: January 22, 2002

For: ELECTRICAL TRANSDUCER

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as First Class Mail in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231, on April 11, 2002.

K.M. McManus

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PRELIMINARY AMENDMENT

Commissioner for Patents
Washington, D.C. 20231

Sir:

Please amend the above-identified application as follow:

In the Specification:

Please amend paragraph [0043] as follows:

[0043] Figures 5a and 5b each show a diagram of one version of an analog scaling unit 8, especially the multiplier 10 of the electrical transducer 1. The two shown multipliers 10 are each made as a single-quadrant multiplier which is characterized in that all input voltages must be positive and may not become zero. The multipliers 10 each have an even number of transistors 15, by which temperature-induced deviations of the transistors 15 can be better compensated. It is especially advantageous if a monolithic transistor array 17 is used as the multiplier 10, by which the voltage equivalents of thermal energy U_T and the temperature-dependent blocking currents I_S cancel one another, so that the correction factor m becomes "one." To implement the multiplier 10 only transistors T_1 to T_4 are necessary, while transistors T_5 and T_6 are integrated in the transistor array 17 by the manufacturer and are used for difference amplifier applications, but here are used only as current sink access to